

# EXHIBIT CC

**AN ANALYSIS OF THE SUPPLEMENTAL REPORT  
OF ELVIRA SISOLAK**

**in the matter of**

**EEOC and Kathy Koch v. LA Weight Loss Centers, Inc.  
Case No. WDQ-02-CV-648**

**by**

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**I. INTRODUCTION**

I have previously submitted a report in this matter "An Analysis of the Statistical Report of Elvira Sisolak," dated August 11, 2006, which addressed the lack of probative value of the statistical evidence presented in the May 25, 2006 report of Plaintiffs' Expert, Elvira Sisolak. My August 11, 2006 report commented on numerous data inconsistencies, misleading presentations, and flawed statistical analyses which ultimately presented no valid statistical evidence that similarly situated men and women who apply for comparable openings at LA Weight Loss Centers, Inc. ("LA Weight Loss") have different rates of selection for those jobs. Subsequently, Elvira Sisolak submitted an additional report, "Supplemental Report on the Hiring of Men by LA Weight Loss Centers, Inc.", November 14, 2006. I have been requested by counsel for Defendant to review and comment upon this supplemental report. Briefly, this supplemental report only addresses and updates one table from Ms. Sisolak's initial August 11, 2006 report (Table 13). Thus, all the comments and criticisms that I noted in my prior report are still pertinent<sup>1</sup>. The remainder of this report reviews my comments on Ms. Sisolak's initial report and addresses the new material related to Table 13.

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<sup>1</sup> Since my initial report and deposition, it is my understanding that Plaintiffs are not pursuing a disparate impact theory. Thus, my comments relating to disparate impact are no longer germane.

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## II. REVIEW OF SISOLAK SUPPLEMENTAL REPORT

As noted above, the Sisolak Supplemental Report presented new figures only for Table 13.

Below is a summary of my comments relating to the materials in Ms. Sisolak's May 25, 2006 Report (apart from comments on her Table 13 and excluding comments which addressed the disparate impact theory of Plaintiffs case).

- to the extent that the EEOC is still relying on census availability figures, such figures a) ignore actual applicants, b) do not adjust for income, leading to estimates which overstate male availability for the Sales Counselor positions (which represent the largest number of positions at issue in this case).
- the database described on pages 7 - 13 of the May 25, 2006 report reflect inconsistencies which raise questions as to the reliability of analyses which flow from these databases.
- Table 10 - the inconsistent treatment of applicants for Medical Assistant positions as a secondary or tertiary job preference translates into an overstatement of males among applicants for other jobs.
- Table 11 - the flawed comparison of hires to all applicants ("bottom-line" analysis) does not have any probative value since a) it does not consider similarly situated applicants, and b) does not even compare hires to those who were eligible to be hired, e.g., those who passed the pre-screening stage or interviewed for the position.
- Table 12 - this descriptive table of Reasons for Non-Hire of Applicants which does not include all reasons for non-hire and is not broken down by gender has no analytical value.

The population of applicants analyzed in Table 13 of Ms. Sisolak's supplemental report expands upon the population of applicants counted in Table 13 of her May 25, 2006 report. Her new Table 13 purportedly additionally includes applicants who applied from the last quarter of 2004 through the second quarter of 2006. The primary flaw in the original Table 13 is replicated in the "new" Table 13.

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That is, analytical comparisons are made for percentages of male and female applicants who are not similarly situated with respect to position sought, geographic location, relevant qualifications, application timing, or any particular factor. The one exception to this (comparisons of applicants who were interviewed and offered jobs) is addressed below.

In this new Supplemental Report, Ms. Sisolak presents a series of calculations, each of which is inappropriate in that they do not compare applicants who are similarly situated in any respect. These inappropriate comparisons include:

- all applicants rejected prior to pre-screening compared to all applicants.
- all applicants offered jobs compared to all applicants interviewed.
- all applicants offered jobs compared to all applicants.
- all applicants rejected by pre-screening compared to all applicants available for pre-screening.
- all applicants who halted the application process compared to all applicants who advanced beyond the initial screening.
- all applicants interviewed compared to all applicants advancing beyond the initial stage of the application process.

None of the above comparisons has any probative value. For example, Ms. Sisolak compares the percent male among those rejected prior to pre-screening to the percent male among all applicants. However, there is no consideration given to any factor. To give a few examples, Ms. Sisolak compares: a) applicants for Sales Counselor with applicants for Area Supervisor, b) applicants for any position in New York with applicants for any position in Los Angeles, and c) applicants for Center Manager in Chicago with applicants for Center Manager in Detroit. Moreover, even when she compares candidates for the same position in the same market, her

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calculation comparisons still contain inappropriate comparisons. For example, Ms. Sisolak compares 2006 applicants for Sales Counselor in Miami with 2004 applicants for Sales Counselor in Miami (for positions which have already been filled). In short, anyone who ever applied for any position at any time in any market is compared with every other applicant anywhere anytime. Such comparisons are not probative of anything.

The only analysis proffered by Ms. Sisolak that makes any attempt to compare applicants who are in some way similarly situated is presented on page 4 of her report. Here, applicants who sought a particular position in a given market and calendar quarter and were interviewed are analyzed with respect to whether or not they were offered a position<sup>2</sup>. However, Ms. Sisolak only reports figures that were aggregated over all markets, calendar quarters, and positions. This presentation (or lack of presentation) masks the results at the individual market level. It also masks the outcomes for each of the five positions that were studied<sup>3</sup>. For example, one cannot tell from Ms. Sisolak's presentation whether men fared better than women in some jobs; one cannot tell what the outcomes were for any individual market; one cannot tell what the outcomes were for particular jobs within any market.

Additionally, it should be pointed out that position sought, geographic location, and calendar quarter of application are the only three factors considered by Ms. Sisolak. If males and females

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<sup>2</sup> Even these studies compare some applicants who cannot be defined as "similarly situated." For example, a candidate who applies for a Sales Counselor position in New York on February 15, 2005 cannot be a viable candidate for a position of the same description and location, if it was filled on January 15, 2005.

<sup>3</sup> While Table 13 of the Sisolak Supplemental Report shows that 2,565 persons were offered a job, inspection of the underlying programs provided indicates that Ms. Sisolak analyzed job offers for five positions - Area Supervisor, Assistant Manager, Center Manager, Sales Counselor, and Medical Assistant, which account for 2,537 job offers.

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differ on other factors or qualifications, and these factors/qualifications correlate to the decision to offer a position, this would affect any calculated shortfall in job offers.

### III. NOTE ON STATISTICAL EVIDENCE

Statisticians report disparities in units of standard deviation. Units of standard deviation can be converted equivalently to probabilities of occurrence. The larger the difference between expected and actual values, the larger the units of standard deviations. The larger the difference in units of standard deviations, the smaller the probability that the difference can be attributed to chance alone. A standard deviation difference greater than 1.965 units is associated with a chance probability value of five percent (0.05) or less.

In this report, I use the term "statistically significant" to indicate a particular result where the difference in units of standard deviations is greater than 1.965 units. Conversely, where this difference is less than 1.965 units of standard deviation, I use the term "not statistically significant". The decision maker in this matter, is free to adopt whatever standard of statistical significance deemed appropriate. However, traditional statistical inference and recent legal opinion tend to agree on the use of two standard deviations as a minimum standard.<sup>4</sup> It should be noted that a standard deviation greater than 1.965, but less than 2.00 would be deemed "statistically significant" using a 0.05 probability standard, but it would be deemed "not statistically significant" using a 2 units of standard deviation standard. In this report, there is one instance where there is a disparity of

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<sup>4</sup> In Hazelwood School District v. United States [433 U.S. 299, 311 n.14 (1977)], the Supreme Court relied upon a two to three standard deviations difference: "If the difference between the expected value and observed number is greater than two or three standard deviations, then the hypothesis that teachers were hired without regard to race would be suspect."

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1.97 units of standard deviation which I have noted as statistically significant.

If the result is statistically significant, does this prove that discrimination has occurred? Absolutely not. It only means that we have examined the available statistical evidence and have made an inference that it is unlikely that the process was gender-neutral. Other factors omitted from the statistical analysis and related to gender could explain a statistically significant disparity.

If the disparity is not statistically significant, then the results are consistent with random chance. Here, the proper statistical conclusion would be that there is no statistical relationship between gender and the decision to offer a job.

#### **IV. ANALYSIS OF JOB OFFERS BY POSITION, MARKET, AND CALENDAR QUARTER**

I was provided with the data that underlays Ms. Sisolak's aggregated shortfall of jobs offered to males from among those interviewed<sup>5</sup>. Using this data base and considering only the three specific factors used by Ms. Sisolak (position sought, geographic location, and calendar quarter corresponding to the date of application), I calculated the shortfalls/surpluses in job offers made to males separately for each of the five positions in each of the geographic locations defined by Ms. Sisolak. Additionally, I calculated whether these surpluses/shortfalls in job offers were statistically significant by geographic location and position. By way of illustration, below are the results for the five markets having the largest number of job offers for each of the five positions.

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<sup>5</sup> The data files I used for my calculations were those provided by Ms. Sisolak on a CD dated October 30, 2006.



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Market	Total Number of Job Offers	Shortfall (Surplus) in Male Job Offers	Shortfall In Units of Standard Deviation <sup>6</sup>	Statistically Significant?
	(1)	(2)	(3)	(4)
<u>Sales Counselor</u>				
Philadelphia	241	2.9	1.04	No
New York	181	3.2	1.23	No
Sacramento	102	0.5	0.06	No
Detroit	96	(0.4)	0.00	No
Baltimore	76	1.1	0.61	No
<u>Assistant Manager</u>				
New York	31	(0.7)	0.18	No
Detroit	27	2.3	1.97	Yes
Philadelphia	26	0.3	0.00	No
Chicago	25	1.4	0.80	No
Houston	20	0.9	0.61	No
<u>Center Manager</u>				
New York	26	0.4	0.00	No
Chicago	23	1.7	1.28	No
Indianapolis	20	0.0	0.00	No
Philadelphia	15	0.5	0.00	No
Detroit	14	0.8	0.58	No
<u>Medical Assistant</u>				
Philadelphia	31	(0.9)	1.24	No
Chicago	26	0.3	0.00	No
Baltimore	24	0.7	0.31	No
Detroit	16	(0.9)	1.13	No
Houston*	10	0.2	0.00	No
Texas*	10	0.0	0.00	No
<u>Area Supervisor</u>				
Chicago	5	0.3	0.00	No
San Francisco	5	0.5	0.00	No
New York	3	0.0	0.00	No
Cleveland	2	0.0	0.00	No
Los Angeles	2	0.2	0.00	No

\* Houston and Texas were tied for fifth largest number of job offers, with 10 each.

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<sup>6</sup> Units of standard deviation were computed using the Mantel-Haenszel statistic (see, for example, page 174 of Fleiss, Joseph L., "Statistical Methods for Rates and Proportions," John Wiley and Sons, Inc., 1981).

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Despite focusing on the markets with the largest number of jobs offers, we see that there are both some surpluses in the number of male job offers and some shortfalls in the number of male job offers. Among the above markets having the 5 largest numbers of job offers for each position, there is only one market that has a statistically significant shortfall in job offers (i.e., Detroit has a marginally statistically significant disparity of 1.97 units of standard deviation for Assistant Manager). However, from the above charts, it is noteworthy that Detroit has a slight surplus in job offers to males for both the Sales Counselor and Medical Assistant positions.

Conducting the above analysis for each market for each position results in a total 160 "sets of decisions" (i.e., combinations of position and market) which encompassed a total of 2,537 job offers. However, there was a statistically significant disparity in male job offers in only two of the 160 "sets of decision" combinations of position and market (Detroit and Miami - both for the position of Assistant Manager). There were 2,237 job offers across 124 markets for the four positions other than Assistant Manager. In none of these 124 sets of position/market combinations did any job show a statistically significant disparity in job offers by gender. In particular, there was no statistically significant disparity in any market for the Sales Counselor position which accounted for 1,734 job offers.

With respect to the issue of aggregation of markets, if there are different decision makers in Detroit than in New York for a position, it is not clear what meaning there is to the combined disparity.<sup>7</sup> I am informed that the decision about which Sales Counselor candidates should be offered jobs out of those interviewed is typically made by an Area Manager who has interviewed the

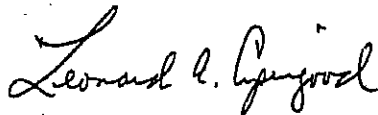
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<sup>7</sup> Under Ms. Sisolak's analyses, the aggregate shortfalls for Assistant Manager, Center Manager, and Sales Counselor would be statistically significant.

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Sales Counselor candidates. I am further informed that Area Managers are typically responsible for conducting interviews and making hiring decisions in a geographic area that is not larger than (and is often smaller than) one market. In using statistics to infer whether the decision of an Area Manager to offer a Sales Counselor candidate employment is being made on the basis of their gender, it makes no sense to consider statistics for markets for which the Area Manager is not responsible nor to aggregate the statistics for such markets as Ms. Sisolak has done. This is because the statistics for other markets tell one nothing about the decisions an Area Manager has made for his or her market. The statistics that are informative about the hiring decisions made by a given Area Manager are those that relate to the Area Manager's specific market.

I understand that Center Managers and Assistant Managers are also hired by Area Managers. Accordingly, the same comments would apply to their decisions. Ms. Sisolak's Supplemental Report (and her initial report) fail to analyze who at LA Weight Loss has involvement in the hiring process, the nature and extent of their responsibilities, and the criteria for different jobs, which has lead her to reach erroneous and unsupported decisions about whether to aggregate the data at the various stages of the hiring process.



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Leonard A. Cupingood, Ph.D.  
Dated: February 14, 2007